IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SERIAL NO.: 10/590637 ART UNIT: 1796

FILED: 23 August 2006 EXAMINER: Heincer, L. J.

TITLE: A SOLUTION OF METAL-POLYMER CHELATE(S) AND APPLICATIONS THEREOF

Amendment B: CLAIM AMENDMENTS

1. (Currently amended) A solution of metal-polymer chelates(s) for static bio-carrier, containing at least one metal-polymer chelates for static bio-carrier, the solution for static bio-carrier comprising by weight the following composition percentage:

a. Main skeleton of the bio-carrier:

9950.87~ 0.00001 percent water;

0.00001 to 40 percent carboxyl group bearing molecules, including at least one carboxylic acid;

0.00001~ 19.89999 percent hydroxyl group bearing compounds polymers, including at least one carbohydrate molecule;

0.00001 to 20 percent metal salts, including at least one metal ion;

b. Two functional groups which tend to the opposite sides of the skeleton:

0.01 ~ 40 percent carboxyl group bearing molecules, including at least one carboxylic acid;

0.00001 ~ 20.09998 percent amino group bearing molecules, including at least one ammonia; and

c.The structure of the well-mixing chelates is tend to chain-form which contains positive and minus polar functional groups beside it, the chelates can mix well with bio-protein:

at most 49.99996 a trace percent of biological proteins comprising biological molecules,

whereby fermentations are proceeded by the solution of metal-polymer chelates(s) solution

for static bio-carrier is capable of assisting in a fermentation to preserve

process , the form of the bio-carrier being selected from a gaseous state, powder, metal(s) of nanometer size, inorganic, organic/inorganic, fluid, semi-fluid, conductor(s), semiconductor(s), thin-film(s), fiber(s), chip(s), cells and bio-tissue(s).

2. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, further comprising ;

~~a soluble hydroxyl polymer, and~~

~~amino group bearing molecules,~~ including at least one protein ~~amino acid~~.

3. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, further comprising ;

soluble carbohydrate ~~low molecular weight~~ molecules , including at least one monosaccharide bimolecules

of monosaccharide derivatives.

4. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, further comprising;

including at least one alkali ~~alkaline soluble fatty acid and soluble carbohydrate molecules~~.

5. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the metal salts are selected from a group consisting of beryllium, magnesium, calcium, strontium, barium, radium, nickel, chromium, lead, copper, iron, zinc, titanium, manganese, cobalt, silver, gold, platinum, palladium, cadmium, lithium, ~~sodium, potassium,~~ rubidium, cesium, mercury, tin, zirconium, aluminum, thallium, antimony, bismuth, germanium, gallium, molybdenum, tungsten, yttrium, scandium, rhodium, iridium, technetium, osmium, ruthenium, rhenium, vanadium, and indium.

6. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the carboxyl group bearing molecules are selected from a group consisting of monocarboxylic acid, dicarboxylic acid, tricarboxylic acid, acetic acid, L-ascorbate, 2-Hydroxybenzoic acid, methanoic acid, propionic acid, propanedioic acid, 2-hydroxypropanoic acid, hydroxybutanedioic acid, butanedioic acid, hexanedioic acid, cis-butendioic acid, trans-butendioic acid, ethanedioic acid, dodecanoic acid, 2,3-dihydrobutanedioic acid, humic acid, nitrified humic acid, fatty acid, opines in a plant, carboxyl acid fiber, and carboxyl resin.

7. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the hydroxyl group bearing compounds ~~polymers~~ are selected from a group consisting of sucrose, maltose, lactose, trehalose, disaccharide molecules, monosaccharide molecules, chitosan, degraded oils, seaweed cell wall (without adding a metal salt), unhusked rice (without adding a metal salt), cytokinin-O-glucosides, amino group containing polyvinyl alcohol, polyvinyl alcohol, humic acid, nitrified humic acid, peat, hydroxypropylmethyl cellulose, and mixture of oil and sugar. .

8. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the solution of metal-polymer chelate(s) after liquid-solid separation processing produces ~~obtains~~ the metal-polymer chelate, the metal-polymer chelates being selected from a group consisting of polymer bridging agent, inorganic polymer carrier, inorganic and organic bridge ~~inorganic~~ polymer, nano inorganic polymer, plant fiber, carboxyl acid fiber, modification having carboxyl acid fiber, carboxyl resin, amino resin, inorganic matter, polylysine, and aminosilane.

9. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the solution of metal-polymer chelates(s) further comprises a moisture absorbent combined with the metal-polymer chelates.

10. (Currently amended) The solution of metal-polymer chelates(s) of claim 8 for static bio-carrier, wherein the polymer bridging agent is comprised of ~~carboxyl group bearing~~ linear polymers ~~molecules and amino group bearing liner molecules~~.

11. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the biological proteins bearing biological molecules are selected from a group consisting of a protein enzyme, a bacterium, and a cell.

12. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the solution of metal-polymer chelates(s) further comprises a silicic acid bearing molecule.

13. (Currently amended) The solution of metal-polymer chelates(s) of claim 1 for static bio-carrier, wherein the solution of metal-polymer chelates(s) further comprises a clay for use in a nanoindustrial application.

14. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, wherein the solution of metal-polymer chelates(s) further comprises a ~~carboxyl group bearing plastic polymer and an amino group bearing~~ plastic polymer for use in a nano plastic industry application.

15. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, in which the solution is ~~being~~ used ~~for~~ in an oxidation process ~~of~~ to produce~~ing~~ oxygen anions~~, including at least one solvent degradations~~.

16. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, in which the solution is ~~being~~ used for a condensation, including at least one oxidizing condensation.

17. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, in which the solution is ~~being~~ used in one of hydroxypropylmethyl cellulose mimic of ~~imitated~~ chitosan, and monosaccharide mimic of ~~imitated~~ glucosamine.

18. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, ~~for fermentation~~ in which the solution is ~~being~~ used in the cultivation and purification of the biological protein bearing biological molecules and their metabolites ~~a biochemical reaction for fermentation~~.

19. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, ~~for fermentation~~ in which the solution is ~~being~~ used in a metal enzyme biocatalyst.

20. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~excluding chitosans~~, in which the solution is ~~being~~ used in a disinfectant.

21. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, ~~for fermentation~~ in which the solution is ~~being~~ used in a biological protein bearing biological molecules culture

medium preservation system.

22. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, ~~for fermentation excluding chitosans,~~ in which the solution is ~~being~~ used for dietary treatments ~~free from chitosan~~ and for health care applications.

23. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentation~~, in which the solution is ~~being~~ used for the production of chemical components ~~matters~~ of a plant.

24. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentation~~, in which the solution is ~~being~~ used for duplication of genes and carriers.

25. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~excluding chitosans~~, in which the solution is ~~being~~ used in a nano filtration system.

26. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentation~~, in which the solution is ~~being~~ used for the production of a ~~fermentation~~ nano material.

27. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentation~~, in which the solution is ~~being~~ used for one of the nano inorganic matter and nano ceramic and nano plastic and nano textile industries.

28. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentation~~, in which the solution is ~~being~~ used in one of the manufacture of biological liquid crystals and biological semiconductors and biochips.

29. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier ~~fermentatio~~n, in which the solution is ~~being~~ used for biological batteries.

30. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 1 for static bio-carrier, in which the solution is ~~being~~ used for processing an oil product, including at least one solvent liquid.

Claims 31-40 (canceled).

41. (Currently amended) A method of using ~~T~~the ~~solution of~~ metal-polymer chelates(s) solution of claim 8 for static bio-carrier, wherein the metal-polymer chelates after purification processing produces ~~obtains~~ at least one substance, the substance being selected from the group consisting of amino metal compound, an amino metal polymer, an amino nano metal polymer, an amino nano metal compound, a nano metal polymer, a nano metal compound, an amino biological protein bearing biological molecules,and a pure biological protein bearing biological molecules.